

Title (en)  
SPOOL SERVO VALVE

Title (de)  
SPULENSERVOVENTIL

Title (fr)  
SERVOVANNE DE BOBINE

Publication  
**EP 3715644 A1 20200930 (EN)**

Application  
**EP 19461524 A 20190329**

Priority  
EP 19461524 A 20190329

Abstract (en)  
A servo valve (10) comprises a valve housing (12), a cavity (16) formed in the valve housing (12) defining an axis (X) and an axially moveable member (18) disposed in the cavity (16). The member (18) comprises flat surfaces (64a, 64b) parallel to the axis (X). A channel (20) is formed within the cavity (16) and a plurality of ports (48a, 48b, 48c) each forming a fluid passage through the valve housing (12) in fluid communication with a spool (80) and with the channel (20). The plurality of ports (48a, 48b, 48c) comprise first and second nozzles (50a, 50c) with nozzle openings (52a, 52c), wherein in a first axial position of the member (18) the first nozzle opening (52a) is at least substantially obstructed by the first flat surface (64a), and in a second axial position of the member (18) the second nozzle opening (52c) is at least substantially obstructed by the second surface (64b), the member (18) controlling fluid between the spool (80) and the channel (20).

IPC 8 full level  
**F15B 13/043** (2006.01); **F16K 11/07** (2006.01)

CPC (source: EP US)  
**F15B 13/0402** (2013.01 - US); **F15B 13/0433** (2013.01 - EP); **F15B 13/0435** (2013.01 - EP); **F15B 13/0438** (2013.01 - US); **F16K 11/0708** (2013.01 - US); **F16K 11/07** (2013.01 - EP)

Citation (search report)  
• [A] US 4527592 A 19850709 - DOTTI GIULIO [IT], et al  
• [A] CA 2221667 A1 19990520 - ORVITEK INC [CA]  
• [A] DE 1650559 B1 19700226 - SCHNEIDER CO OPTISCHE WERKE

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3715644 A1 20200930; EP 3715644 B1 20231108**; US 11060536 B2 20210713; US 2020309163 A1 20201001

DOCDB simple family (application)  
**EP 19461524 A 20190329**; US 202016832197 A 20200327